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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,436	07/30/2001	Todd D. Newman	36.P288	1490
5514	7590	07/27/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			HAVAN, THU THAO	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2672	9

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,436

Applicant(s)

NEWMAN, TODD D.

Examiner

Thu-Thao Havan

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Claims 1-26 and 30 are pending in the present application.

Response to Arguments

Applicant's arguments filed May 17, 2004 have been fully considered but they are not persuasive. As addressed below, Ohga teaches the claimed limitations.

Ohga teaches the steps of plural different target color values for the color in respective ones of multiple different viewing conditions in a viewing condition dependent space (col. 8, lines 31-67; col. 9, lines 1-47; col. 16, lines 34-63; figs. 1-3); calculating a single color value in device dependent color space that fits the plural target color values with acceptable error (col. 19, line 48 to col. 20, line 37; col. 23, line 1 to col. 25, line 65; figs. 25 and 27). Ohga discloses multiple different viewing conditions when he discloses view condition 1 and view condition 2. In that he discloses a data generation portion for generating data, which is dependent on the viewing condition 1 of a data input side, based on an input profile and the viewing condition 1. He discloses a gamut mapping mode selection portion for selecting whether the gamut mapping is performed in the JCH color perception space or in the QMH color perception space in accordance with designation by a user or designation by the profile. He further discloses a gamut mapping portions respectively for performing gamut mapping on data in the JCH or QMH color perception space in accordance with an output profile. In that a data generation portion for generating data, which is dependent on a viewing condition 2 of

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an image output side, based on the output profile and viewing condition 2. A color matching portion for performing color matching by utilizing the data which is dependent on the viewing condition 1, the gamut mapped data, the data which is dependent on the viewing condition 2, and color appearance model. As for calculating a single color value, he discloses the Von Kries conversion. In the scaling operation, XYZ values under a reference white point W1 are converted to XYZ values under a reference white point W2 at a ratio of $W2/W1$. If this conversion method is applied to the Lab uniform color space, the Lab values under W1 become equal to the Lab values under W2. Assuming that XYZ values of a sample under W1 ($Xw1, Yw1, Zw1$) are ($X1, Y1, Z1$) and XYZ values of the sample under W2 ($Xw2, Yw2, Zw2$) are ($X2, Y2, Z2$), the following relations are obtained by the scaling operation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims **1-26 and 30** are rejected under 35 U.S.C. 102(e) as being unpatentable by Ohga (US patent no. 6,542,634).

Re claim **1**, Ohga teaches a method for converting a color value of a color in a perceptual color space (col. 2, lines 48-64), comprising the steps of applying multiple

inverse transforms to the color value each transform for transforming the color value from a perceptual color space to a viewing condition dependent color space each different inverse transform corresponding to a different viewing condition thereby resulting in plural different target color values for the color in respective ones of multiple different viewing conditions in a viewing condition dependent space (col. 8, lines 31-67; col. 9, lines 1-47; col. 16, lines 34-63); calculating a single color value in device dependent color space that fits the plural target color values with acceptable error (col. 19, line 48 to col. 20, line 37; col. 23, line 1 to col. 25, line 65; figs. 25 and 27). In other words, Ohga teaches a profile dependent on a viewing condition. He teaches converting color target data in independent color space to data in a human color perception space based on a condition for measuring the color target data and converting the data in the color perception space to data in an independent color space, which is independent of any device, based on the viewing condition so as to generate the profile. In that he discloses generating a profile dependent on a viewing condition for selecting a corresponding profile from a plurality of profiles respectively corresponding to viewing conditions.

Re claims **2-6, 20, and 23-25**, Ohga teaches calculating a color value in device dependent color space comprises the step of applying regression analysis to the plural different target color values using a spectral model that measures spectral reflectance of colors in the device dependent color space (col. 20, lines 1-39; col. 25, lines 5-25; col. 26, line 1-30). In other words, Ohga teaches the viewing condition is obtained by equation thus consisting of applying regression analysis.

Re claims **7-8, 17-18, and 21-22**, Ohga teaches multiple different viewing conditions comprises different viewing illuminants and multiple different surrounds (figs. 2). In figure 2, Ohga teaches multiple different viewing conditions by illustrating at least two different types of viewing conditions.

Re claim **9**, Ohga teaches gamut-mapping in the perceptual color space (figs. 8a-8b and 9a-9b). In Ohga, figures 8a and 8b are conceptual views of the gamut mapping in the JCH color perception space. Figures 9a and 9b are conceptual views of the gamut mapping in the QMH color perception space.

Re claims **10 and 26**, Ohga teaches storing the device dependent values in a look-up table accessible as a function of the color values in perceptual color space (col. 20, lines 56-65). In other words, Ohga teaches the data is converted to output data in a color space, which is dependent on an output device, by the conversion LUT.

Re claims **11-12**, Ohga teaches estimating likely XYZ values for a given color patch based on probabilistic estimates of the most likely viewing conditions, measurements of the spectral reflectance of colorants on a given medium and the response functions of the CIE Standard Observer so as to perform gamut mapping (col. 5, lines 31-59). Ohga teaches a conversion method such as CIE CAM 97s using the human color perception space QMH (or JCH) is employed.

Re claims **13-15**, Ohga teaches a program memory for storing process steps executable to perform a method (col. 8, lines 24-55). Ohga discloses the storage device for storing color information.

Re claims **16 and 19**, the limitations of claims 16 and 19 are identical to claim 1 above. Therefore, claims 16 and 19 are treated the same as discussed with respect to claim 1 above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu-Thao Havan whose telephone number is (703) 308-7062. The examiner can normally be reached on Monday to Thursday from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Thu-Thao Havan
July 21, 2004



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600